PcCR 1417 PM gain verification/adjustment procedure

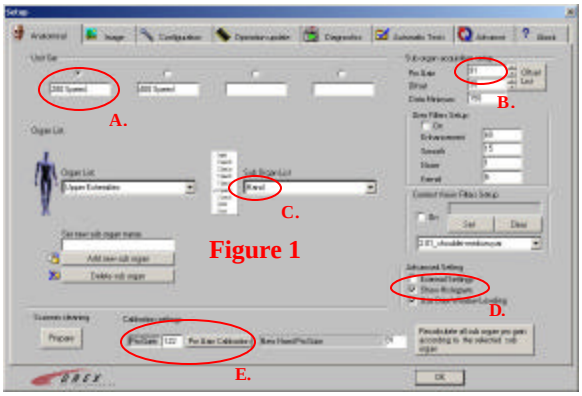


Figure 1

Step 1. Prepare Scanner:

- Enter setup in the scanner interface.
- Turn on "Show Histogram" option by checking the box. (Figure 1.D)
- Be sure correct "unit set" is selected. (Figure 1.A)
- Select "hand" as the sub organ. (Figure 1.C)

Step 2. Set X-Ray machine:

- Use settings for "AP Hand".
- Use guide below **ONLY** if unsure of settings.

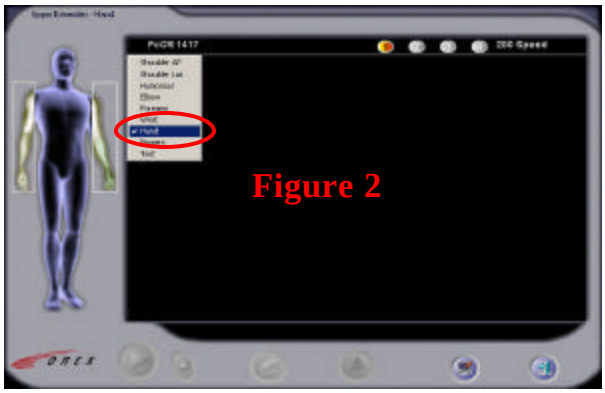
200 Speed Technique	400 Speed Technique
• 60 Kvp	• 60 Kvp
• 2.6 Mas	• 1.4 Mas
• 40" distance	• 40" Distance
• 75 uGy on dosimeter	• 40 uGy on Dosimeter

Step 3. Expose Cassette:

- Position Cassette and 6mm aluminum plate in X-Ray field and expose. (Note: system comes with two 3mm plates, use both)
- 6mm plate is placed on top of cassette, in the center.

Step 4. Scan Image:

- NOTE: Be sure "hand" is selected.



Step 5. Verify Pixel Values:

- Check the value of the "aluminum plate" spike on the histogram.(figure 3)
- If histogram is not shown after scan, go back to step 1.
- Pixel value needs to be 2000 +/- 10%
- If pixel value is between 1800 – 2200, go to last line of Step 6.
- If pixel value is below 1800 or above 2200 go to step 6.

Step 6. Adjust PM gain value:

- Pixel value, from step 5, is lower than 1800, decrease Sub Organ PM gain (figure 1.B) by 5.
- Pixel value, from step 5, is higher than 2200, increase Sub Organ PM gain (figure 1.B) by 5.
- REPEAT STEPS 3 through 5.
- Enter Sub organ PM gain value (figure 1.B) into PM Gain Calibration Window (Figure 1.E). Press "PM Gain Calibration" button, then Answer "YES". Your DONE, all Sub Organ PM gain values have been set to this Value.